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Stresses in the superflywheel

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Abstract

© Published under licence by IOP Publishing Ltd.We obtain exact solutions for the problem of superflywheel that is rotating around its own axis. Superflywheel is made by the nozzle at each other with tension and subsequent gluing of the family of concentric cylinders. The effect of different methods of cylinder heads on each other to the maximum stresses in the superflywheel are analyzed, estimations are given for the possible increase of its specific energy consumption. Increasing in the specific energy consumption is marked by the decreasing in relative radius of superflywheel's the inner hole and with an increase in the Poisson ratio in material of superflywheel.

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